

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/064343 A1

(51) International Patent Classification⁷: **G01N 33/68**,
33/574

(74) Agent: **GRUBB, Philip**; Novartis AG, Corporate Intellectual Property, CH-4002 Basel (CH).

(21) International Application Number:
PCT/EP2004/014549

(22) International Filing Date:
21 December 2004 (21.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/531,700 22 December 2003 (22.12.2003) US

(71) Applicant (for all designated States except AT, US): **NOVARTIS AG** [CH/CH]; Lichtstrasse 35, CH-4056 Basel (CH).

(71) Applicant (for AT only): **NOVARTIS PHARMA GMBH** [AT/AT]; Brunner Strasse 59, A-1230 Vienna (AT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BOULAY, Anne** [FR/FR]; 9 Rue des Prés, F-68730 Blotzheim (FR). **LANE, Heidi** [CH/CH]; Lehenmattstrasse 189, CH-4052 Basel (CH). **MAIRA, Sauveur-Michel** [FR/FR]; 3c, rue de Homburg, F-68440 Habsheim (FR). **O'REILLY, Terence** [CA/CH]; Drahtzugstrasse 51, CH-4057 Basel (CH).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BIOMARKERS FOR SENSITIVITY OF PROLIFERATIVE DISEASES TO MTOR INHIBITORS

(57) Abstract: Disclosed is a method for determining the sensitivity of a proliferate disease in a subject to treatment with an mTOR inhibitor, comprising determining the level of expression and/or phosphorylation state of S6 in a sample derived from the subject, as well as related methods of treatment and uses.



WO 2005/064343 A1